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RAYMOND Y. CHAN
108 N. YNEZ AVE., SUITE 128
MONTEREY PARK, CA 91754

EXAMINER	
CHOU, ANDREW Y	

ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/633,341	LIU, HANBAI	
	Examiner	Art Unit	
	Andrew Y. Chou	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-35have been examined. Claims 1, 24, 33, and 35 are the independent claims. The priority date recognized for this application is 08/04/2003.

Oath/Declaration

2. The Office acknowledges receipt of a properly signed oath/declaration filed on 08/04/2003.

Claim Objections

3. Claim 27 is objected to because of the following informalities: Line 1 of claim 27 recites "The method, as recited in claim 2", and should instead read – The method, as recited in claim 24 --. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Bailey et al. US 6,684,385 B1 (hereinafter Bailey).

Claim 1:

Bailey discloses a visual programming system, comprising:

one or more function modules each of which is provided with an applicable functional programming command stored in a computer executable language in a processing unit to accomplish a substantial applicable function (see for example column 7, lines 7-23, FIG. 3, items 318, 320, "arrows", and related text); and

one or more commanding flow arrows (see for example FIG. 3, items 318, 320, "arrows", and related text) connecting the function modules with each other in a predetermined sequence to construct a visual graphic program which is compiled to machine readable codes of said computer executable language, wherein information outputted from said applicable functional programming command of one of said function modules is inputted to another said applicable functional programming command of another said function module that is connected with said one of said function modules by said commanding flow arrow, so as to construct said visual graphic program in said computer executable language in said processing unit (see for example FIGs. 4A-4D, and related text).

Claim 2:

Bailey further discloses the system, as recited in claim 1, further comprising one or more determination modules each of which is provided with a determining test stored in computer executable language in the processing unit, wherein each of said determination modules is connected with three of said function modules and other said determination modules at an determination input, a "True" output and a "False" output

thereof by three of said commanding flow arrows to construct said visual graphic program, wherein after said visual graphic program is compiled to machine readable codes, each of said determination modules conducts said determining test to send information inputted selectively to said function module or said determination module connected to said "True" output and said "False" output (see for example column 8-9, “Program Object Properties”).

Claim 3:

Bailey further discloses the system, as recited in claim 1, wherein each of said function modules has at least an information input for inputting information and an information output for outputting computed information, wherein when said commanding flow arrow has an arrow end connected to said information input of one of said function modules and another starting end connected to said information output of another said function module, information inputs to said applicable functional programming command of said function module from said another function module that outputs said information (see for example column 15, lines 55-59, “input terminal”, “output terminal”).

Claim 4:

Bailey further discloses the system, as recited in claim 2, wherein each of said function modules has at least an information input for inputting information and an information output for outputting computed information, wherein when said commanding flow arrow has an arrow end connected to said information input of one of said function modules and another starting end connected to said information output of another said function module, information inputs to said applicable functional programming command of said

function module from said another function module that outputs said information (see for example column 15, lines 55-59, "input terminal", "output terminal").

Claim 5:

Bailey further discloses the system, as recited in claim 2, wherein each of said function modules has at least an information input for inputting information from one of said determination modules, when said commanding flow arrow has an arrow end connected to said information input of one of said function modules and another starting end connected to either said "True" output or said "False" output of said determination module, information inputs to said applicable functional programming command with respect to said function module from said determination module that outputs said information (see for example column 17, lines 5-10).

Claim 6:

Bailey further discloses the system, as recited in claim 1, wherein a construction of said function modules, said determination modules and said commanding flow arrows is displayed by said processing unit via a monitor thereof as said visual graphic program which directly represents said computer executable language to be stored in said processing unit to operate and function (see for example FIG. 2, item 232, "display monitor").

Claim 7:

Bailey further discloses the system, as recited in claim 4, wherein a construction of said function modules, said determination modules and said commanding flow arrows is displayed by said processing unit via a monitor thereof as said visual graphic program

which directly represents said computer executable language to be stored in said processing unit to operate and function (see for example FIG. 2, item 210, "CPU", and FIG. 3, and related text).

Claim 8:

Bailey further discloses the system, as recited in claim 5, wherein a construction of said function modules, said determination modules and said commanding flow arrows is displayed by said processing unit via a monitor thereof as said visual graphic program which directly represents said computer executable language to be stored in said processing unit to operate and function (see for example FIGs. 4A-4D, and related text).

Claim 9:

Bailey further discloses the system, as recited in claim 1, wherein human readable source codes of a source code program are converted and arranged into different said function modules of said visual graphic program according to a conversion rules database (see for example FIGs. 4A-4D, and related text).

Claim 10:

Bailey further discloses the system, as recited in claim 4, wherein human readable source codes of a source code program are converted and arranged into different said function modules and said determination modules of said visual graphic program according to a conversion rules database (see for example column 10 line 62- column 11, line 26, "rules").

Claim 11:

Bailey further discloses the system, as recited in claim 5, wherein human readable

source codes of a source code program are converted and arranged into said different function modules and said determination modules of said visual graphic program according to a conversion rules database (see for example column 10 line 62- column 11, line 26, "rules").

Claim 12:

Bailey further discloses the system, as recited in claim 1, further including a user editing interface to construct said visual graphic program by selecting said function modules and linking said selected function modules by said commanding flow arrows, and a compiler which is used to convert said human readable source code program into said machine readable codes of said computer executable language following predetermined conversion instructions of a conversion rules database (see for example FIG. 3, items 312, "Visual Programming System", 314, "Graphical designer system", and related text).

Claim 13:

Bailey further discloses the system, as recited in claim 4, further including a user editing interface to construct said visual graphic program by selecting said function modules and said determination modules and linking said selected function modules and determination modules by said commanding flow arrows (see for example FIG. 4A, item 400, "Gui", and related text), and a compiler which is used to convert said human readable source code program into said machine readable codes of said computer executable language following predetermined conversion instructions of a conversion rules database (see for example column 1, lines 38-50, and related text).

Claim 14:

Bailey further discloses the system, as recited in claim 5, further including a user editing interface to construct said visual graphic program by selecting said function modules and said determination modules and linking said selected function modules and determination modules by said commanding flow arrows, and a compiler which is used to convert said human readable source code program into said machine readable codes of said computer executable language following predetermined conversion instructions of a conversion rules database (see for example FIG. 3, items 312, "Visual Programming System", 314, "Graphical designer system", and related text).

Claim 15:

Bailey further discloses the system, as recited in claim 9, further including a user editing interface to construct said visual graphic program by selecting said function modules and linking said selected function modules by said commanding flow arrows, and a compiler which is used to convert said human readable source code program into said machine readable codes of said computer executable language following predetermined conversion instructions of said conversion rules database (see for example FIG. 4A, item 400, "Gui", column 14, line 45- column 15, line 35, "WIRE CONTROL PROPERTIES", and related text).

Claim 16:

Bailey further discloses the system, as recited in claim 10, further including a user editing interface to construct said visual graphic program by selecting said function modules and said determination modules and linking said selected function modules and determination modules by said commanding flow arrows, and a compiler which is

used to convert said human readable source code program into said machine readable codes of said computer executable language following predetermined conversion instructions of said conversion rules database (see for example FIG. 3, items 312, "Visual Programming System", 314, "Graphical designer system", and related text).

Claim 17:

Bailey further discloses the system, as recited in claim 11, further including a user editing interface to construct said visual graphic program by selecting said function modules and said determination modules and linking said selected function modules and determination modules by said commanding flow arrows, and a compiler which is used to convert said human readable source code program into said machine readable codes of said computer executable language following predetermined conversion instructions of said conversion rules database (see for example FIG. 4A, item 400, "Gui", column 14, line 45- column 15, line 35, "WIRE CONTROL PROPERTIES", and related text).

Claim 18:

Bailey further discloses the system, as recited in claim 12, wherein said user editing interface comprises a command selection panel (see for example FIG. 4A, item 406, "designer window", and related text), a selected command panel (see for example FIG. 4A, item 410, "menu bar", and related text), and a file management panel (see for example FIG. 4A, item 404, "form window", and related text), wherein said command selection panel comprises selectable commands, including determining test commands in human readable programming languages, commanding flow arrows representing

direction of flow of said program and functional commands, wherein when a command is selected from said command selection panel, said selected command appears in said selected command panel and, by arranging selected commands into a flow chart form, said visual graphic program is completed (see for example column 8, lines 26-51).

Claim 19:

Bailey further discloses the system, as recited in claim 13, wherein said user editing interface comprises a command selection panel, a selected command panel, and a file management panel, wherein said command selection panel comprises selectable commands, including determining test commands in human readable programming languages, commanding flow arrows representing direction of flow of said program and functional commands, wherein when a command is selected from said command selection panel, said selected command appears in said selected command panel and, by arranging selected commands into a flow chart form, said visual graphic program is completed (see for example column 8, lines 26-51, FIG. 4A, and related text).

Claim 20:

Bailey further discloses the system, as recited in claim 14, wherein said user editing interface comprises a command selection panel, a selected command panel, and a file management panel, wherein said command selection panel comprises selectable commands, including determining test commands in human readable programming languages, commanding flow arrows representing direction of flow of said program and functional commands, wherein when a command is selected from said command selection panel, said selected command appears in said selected command panel and,

by arranging selected commands into a flow chart form, said visual graphic program is completed (see for example column 8, lines 26-51, FIG. 4A, and related text).

Claim 21:

Bailey further discloses the system, as recited in claim 15, wherein said user editing interface comprises a command selection panel, a selected command panel, and a file management panel, wherein said command selection panel comprises selectable commands, including determining test commands in human readable programming languages, commanding flow arrows representing direction of flow of said program and functional commands, wherein when a command is selected from said command selection panel, said selected command appears in said selected command panel and, by arranging selected commands into a flow chart form, said visual graphic program is completed (see for example column 8, lines 26-51, FIG. 4A, and related text).

Claim 22:

Bailey further discloses the system, as recited in claim 16, wherein said user editing interface comprises a command selection panel, a selected command panel, and a file management panel, wherein said command selection panel comprises selectable commands, including determining test commands in human readable programming languages, commanding flow arrows representing direction of flow of said program and functional commands, wherein when a command is selected from said command selection panel, said selected command appears in said selected command panel and, by arranging selected commands into a flow chart form, said visual graphic program is completed (see for example column 8, lines 26-51, FIG. 4A, and related text).

Claim 23:

Bailey further discloses the system, as recited in claim 17, wherein said user editing interface comprises a command selection panel, a selected command panel, and a file management panel, wherein said command selection panel comprises selectable commands, including determining test commands in human readable programming languages, commanding flow arrows representing direction of flow of said program and functional commands, wherein when a command is selected from said command selection panel, said selected command appears in said selected command panel and, by arranging selected commands into a flow chart form, said visual graphic program is completed see for example column 8, lines 26-51, FIG. 4A, and related text).

Claim 24:

Bailey discloses a visual programming method, comprising:

(a) assigning one or more function modules each of which is provided with an applicable functional programming command stored in a computer executable language in a processing unit to accomplish a substantial applicable function (see for example column 8, lines 26-30, "icon"); and

(b) connecting said function modules in a predetermined sequence with one or more commanding flow arrows, each pointing from one direction to another to construct a visual graphic program (see for example column 8, lines 12-26); and

(c) compiling said visual graphic program to machine readable codes of said computer executable language by inputting information outputted from said applicable functional programming command of one of said function modules to another said applicable

functional programming command of another said function module that is connected with said one of said function modules by said commanding flow arrow, so as to construct said visual graphic program in said computer executable language in said processing unit (see for example column 13, line 57-column 14, line 14).

Claim 25:

Bailey further discloses the method, as recited in claim 24, after the step (a), further comprising a step of assigning one or more determination modules each of which is provided with a determining test stored in said computer executable language in said processing unit, wherein each of said determination modules is connected with three of said function modules and other said determination modules at an determination input, a "True" output and a "False" output thereof by three of said commanding flow arrows to construct said visual graphic program, wherein after said visual graphic program is compiled to said machine readable codes, each of said determination modules conducts said determining test to send information inputted selectively to said function module or said determination module connected to said "True" output and said "False" output.

Claim 26:

Bailey further discloses the method, as recited in claim 24, wherein each of said function modules has at least an information input for inputting information and an information output for outputting computed information, wherein when said commanding flow arrow has an arrow end connected to said information input of one of said function modules and another starting end connected to said information output of another said

function module, information inputs to said applicable functional programming command of said function module from said another function module that outputs said information (see for example column 8-9, "Program Object Properties").

Claim 27:

Bailey further discloses the method, as recited in claim 2, wherein each of said function modules has at least an information input for inputting information and an information output for outputting computed information, wherein when said commanding flow arrow has an arrow end connected to said information input of one of said function modules and another starting end connected to said information output of another said function module, information inputs to said applicable functional programming command of said function module from said another function module that outputs said information (see for example column 15, lines 55-59, "input terminal", "output terminal").

Claim 28:

Bailey further discloses the method, as recited in claim 25, wherein each of said function modules has at least an information input for inputting information from one of said determination modules, when said commanding flow arrow has an arrow end connected to said information input of one of said function modules and another starting end connected to either said "True" output or said "False" output of said determination module, information inputs to said applicable functional programming command with respect to said function module from said determination module that outputs said information (see for example column 15, lines 55-59, "input terminal", "output terminal" and column 8-9, "Program Object Properties").

Claim 29:

Bailey further discloses the method, as recited in claim 25, wherein human readable source codes of a source code program are converted and arranged into different said function modules and said determination modules of said visual graphic program according to a conversion rules database (see for example column 10 line 62- column 11, line 26, "rules").

Claim 30:

Bailey further discloses the method, as recited in claim 28, wherein human readable source codes of a source code program are converted and arranged into different said function modules and said determination modules of said visual graphic program according to a conversion rules database (see for example column 10 line 62- column 11, line 26, "rules", FIG. 4A, and related text).

Claim 31:

Bailey further discloses the method, as recited in claim 29, wherein said visual graphic program is constructed by a user editing interface by selecting said function modules and said determination modules and linking said selected function modules and determination modules by said commanding flow arrows, and said human readable code program is converted by a compiler into machine readable codes of said computer executable language following predetermined conversion instructions of said conversion rules database (see for example FIG. 4A, item 400, "Gui", column 14, line 45- column 15, line 35, "WIRE CONTROL PROPERTIES", and related text).

Claim 32:

Bailey further discloses the method, as recited in claim 30, wherein said visual graphic program is constructed by a user editing interface by selecting said function modules and said determination modules and linking said selected function modules and determination modules by said commanding flow arrows, and said human readable code program is converted by a compiler into machine readable codes of said computer executable language following predetermined conversion instructions of said conversion rules database (see for example FIG. 4A, item 400, "Gui", column 14, line 45- column 15, line 35, "WIRE CONTROL PROPERTIES", and related text).

Claim 33:

Bailey discloses a method of allowing computer programs to be inputted without using advanced programming languages, comprising the steps of:

(a) establishing a conversion rule database containing conversion instructions of converting selectable commands to machine readable codes (see for example column 10 line 62- column 11, line 26, "rules");

(b) providing a selection platform, wherein said selectable commands are listed out for a user to select a set of selected commands according to a desired flow of functions to be performed (see for example column 14, lines 15-36, "form window"); and

(c) compiling said selected commands into machine readable codes according to said set of conversion instructions (see for example column 1, lines 38-50, and related text).

Claim 34:

Bailey further discloses the method, as recited in claim 33, before the step (c), further comprising a sub-step of storing said selected commands inside a processing unit (see

for example FIG. 2, item 210, "CPU", and FIG. 3, and related text).

Claim 35:

Bailey discloses a method of allowing a designed computer program to be customized without using advanced programming languages, comprising the steps of:

(a) establishing a reverse conversion rule database containing reverse conversion instructions of reverse converting machine readable codes of said designed computer program to human understandable codes (see for example column 10 line 62- column 11, line 26, "rules");

(b) establishing a set of conversion rule database containing conversion instructions of converting selectable commands to machine readable codes (see for example column 10 line 62- column 11, line 26, "rules");

(c) providing an imported code viewing platform, wherein said machine readable codes of said designed computer program are converted to and listed out as said human understandable codes according to said reversion conversion instructions (see for example FIGs. 4A-4D, and related text);

(d) providing an editing platform, wherein selectable commands are listed out for a user to insert selected commands into said human understandable codes and deleting sections of said human understandable codes, forming a set of edited codes, according to a desired flow of functions to be performed (see for example FIG. 3, and related text); and

(e) compiling said edited codes into machine readable codes following said set of conversion rules (see for example column 1, lines 38-50, and related text).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y. Chou whose telephone number is (571) 272-6829. The examiner can normally be reached on Monday-Friday, 8:00 am – 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached on (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed tot eh TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

TUAN DAM
SUPERVISORY PATENT EXAMINER